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EXAMINER	
PATEL, KAUSHIKKUMAR M	
ART UNIT	**PAPER NUMBER**
2188	

NOTIFICATION DATE	DELIVERY MODE
08/22/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/829,168	UENO, TOSHIHARU	
	Examiner	Art Unit	
	KAUSHIKKUMAR PATEL	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,6,9 and 11-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6,9 and 11-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 03, 2008 has been entered.

Response to Amendment

2. This Office Action is in response to applicant's communication filed May 22, 2008 in response to PTO Office Action mailed December 13, 2007. The applicant's remarks and amendments to the claims and/or specification were considered with the results that follow.

3. In response to last Office Action, claims 1, 3, 6, 9 and 11-13 have been amended. Claims 2, 4, 5, 7, 8 and 10 have been canceled. No claims have been added. As a result, claims 1, 3, 6, 9, and 11-13 remain pending in this application.

4. The rejections and/or objections not mentioned here are withdrawn due to the amendments filed on May 22, 2008.

Response to Arguments

5. Applicant's arguments filed May 22, 2008 have been fully considered, but they are not persuasive.

6. Applicant argues that Chiba always allocates a master boot record (MBR) to a page in the block that contains the page with FAT. The examiner respectfully disagrees with the fact that Chiba "always" allocates MBR to a page that contains FAT. According to fig. 4, of Chiba, the first block is allocated to MBR and second block is allocated to FAT and director region and it is clearly mentioned in col. 16, lines 47-54:

> "Although in the format shown in FIG. 4, **the boot information and other information like FAT are written in separate blocks**, it is permissible to write these information items in the same cluster (block)"

Here as mentioned above, the boot information and FAT are separately written into two different blocks, However it can be written in same block, thus the applicant's argument that "MBR and FAT are always written in the same block" is not persuasive. Chiba further teaches cluster and block have the same size (col. 17, lines 13-16) and they can contain various numbers of pages in the block/cluster (e.g. eight, sixteen etc.) but that does not automatically means cluster having eight pages is half the block. According to figs. 4 and 16, the cluster has the same size as the block and according to fig. 14, the cluster size is three times the block size, that means the cluster can be of variable size but in separate embodiment, the cluster and block can be of the same size and as shown in the figs. 1 and 16, boot region is clearly allocated to a separate block other than FAT/Directory regions. Thus, it can be inferred that Chiba allocates frequently changing information (FAT/Directory information) in specified block.

Applicant further agues that Chiba merely states that a file occupies one or more blocks, and sizes of the FAT and directory are set to the same size as single block, hence the FAT and directory are stored in exactly in a block and further argues that fig. 16 only indicates that a block may have FAT and/ or directory information, this does not teach the allocating and disabling steps. Here it is noted that as admitted by the applicant, fig. 16 of Chiba teaches a flag that indicates a block [may have] contains the FAT and directory information (means a specific region of block is allocated to frequently changing information). Applicant further argues that if the directory can be considered as frequently changing information than block 2, for example does not have disabled remaining pages (page 8), because all pages in block 2 are occupied by frequently changing information. Here it is noted that as shown in fig. 16 of Chiba, the cluster group is allocated as FAT/directory region, that automatically does not mean that block 1 of the cluster group is allocated to FAT and block 2 is allocated to directory information. Further by allocating a certain space to a FAT or directory information does not automatically mean that the space is wholly occupied. On the contrary, according to Chiba, the cluster group marked with value flag value “FFh” can be used to store ordinary user data, see col. 19, lines 53-57:

> “The structures of the directory and FAT are substantially the same as the first and second embodiments. As shown in FIG. 17, an identification flag employing the value "FFh" **which cannot be used by ordinary data** is written at a head of a cluster group in which the FAT and directory are written.”

Fig. 17 clearly shows an unused space at the bottom of the directory, which means there can be unused space, which can not be used for ordinary data (Chiba, col.

19, lines 53-57) other than FAT and directory information. Thus, Chiba teaches a block containing a block containing frequently changing information (FAT/directory) and remaining (unused) space, which can not be used by the ordinary user data. Chiba further teaches that FAT and directory can also be allocated separately (col. 16, lines 37-42):

> "Although in a format shown in FIG. 4, the FAT and directory are allocated in the same cluster, **it is permissible to allocate them separately**. In this case, **by making a cluster storing the FAT and directory correspond to "1", "2"** or other specified number cluster, the positions of the FAT and direction are determined."

Thus, it can be inferred from above explanation that the entire block can be allocated to FAT, directory, boot information and combination of FAT and directory as well as all the information (e.g. boot, FAT and directory) together in one block, however as taught with respect to fig. 17, when the block containing FAT is marked with the flag "FFh", the remaining unused portion of the block can not be used for ordinary user data. Applicant's other argument that directory is not frequently changing is not persuasive, because as claimed by the applicant, the directory can be frequently changing information (see claim 1, lines 11-12, "wherein the frequently changing information is managing data recorded in the recording medium or root directory information").

Applicant's remaining arguments with respect to claim 1 are moot in view of new grounds of the rejection.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 3, 6, 9, and 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation “at least one page” in line 10. Here, the limitation is open to interpretation, as it is not clear the limitation “at least one page" refers to the limitation "at least one page" of the line 6 or different one?

Claims 3, 6, 9 and 11-13 are also rejected due to their dependency on rejected claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiba (US 6,411,552).

As per claim 1, Chiba teaches a method of recording and reproducing information in which a recording area of a recording medium is physically divided into plurality of blocks and each block is partitioned into plurality of pages (fig. 1, item 1, fig. 2 shows recording medium is divided into blocks and blocks are further divided into

pages, also col. 5, lines 50-60, col. 2, lines 27-30, data erasing is carried out in units of one block, col. 17, line 65 – col. 18, line 5), the method comprising step of:

recording and erasing information in at least one the pages in blocks of the plurality of blocks (Chiba, col. 2, lines 27-29);

allocating a specific area having a frequently changing information to at least one page in one block of the plurality of blocks (Chiba, fig. 4, col. 16, lines 37-42, “FAT and directory are allocated in the same cluster, it is permissible to allocate them separately");

disabling remaining pages in said one block when said allocating step allocates the frequently changing information to said at least one page in said block, wherein said remaining pages include at least one page (Chiba teaches allocating certain block (e.g. fig. 4, cluster 1, block 2) to a FAT area and directory area, however they can also be separately stored in the respective blocks/clusters (see col. 16, lines 37-42). Chiba further teaches storing a flag "FFh" in the block, where the FAT information is stored, such that the remaining space (fig. 17) not used by the FAT information can not be used for ordinary data (col. 19, lines 48-61)). According to present application specification page 3, lines 3-8, the disabled pages provides distinction between FAT area and other area, such that ordinary user data is not stored in the remaining pages, thus it can be inferred that Chiba teaches disabling remaining pages (remaining space in the block) where the FAT is allocated.

Chiba further teaches the frequently changing information is at least one of managing data recorded in the medium, FAT and root directory (Chiba, fig. 4, col. 16, lines 37-46, col. 19, lines 47-61).

As per claim 11, Chiba teaches recording area (0 x 55) is recorded into area management information in the page corresponding to FAT area (Chiba, col. 19, lines 55).

As per claim 13, Chiba teaches that allocating the specific area distinguishes the specific area having frequently changing information from ordinary data area, so as to reduce amount of data modification of specific area (Chiba, col. 19, line 55, col. 2, lines 26-31).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 3, 6, 9, and 12 are rejected under **35 U.S.C. 103(a)** as being unpatentable over Chiba (US 6,411,552) as applied to claim 1 and further in view of Estakhri et al. (US 6,978,342).

With respect claim 3, Chiba teaches all the limitations of claim 1 and further teaches area for management information and user area (Chiba, figs, 16 and 17), but

fails to teach pages provided with area for recording information indicating area allocated, area unused, area disabled as required by claim 3. Chiba also teaches a flag which is attached to head of the FAT region such that remaining free space is not used for ordinary user data (Chiba, col. 19, lines 55-61), however Estakhri teaches various flags that can be applied to per page basis (fig. 1, items 110, 112, 114, 116). Thus, It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize flags per page basis as taught by Estakhri in the system of Chiba to improve performance by providing rapid access to stored data (Estakhri, col. 3, lines 44-55, col. 4, lines 5-30).

As per claim 6, Chiba teaches upon recording of information into the recording medium, allocating the block being unused to logical space and recording information into the block (Chiba, col. 14, line 44 – col. 15, line 24);

reading and modifying contents of the data management area in the recording medium; recording the modified data management area into another unused block in the recording medium (Chiba col. 15, lines 25-30, col. 13, line 60 – col. 14, lines 17); and erasing the data management area before modified, and turning the block where the data management area before modified has resided into the block unused (Chiba, col. 14, lines 24-42, where it is readily apparent that the erase block turned into unused block).

As per claim 9, Chiba teaches all the limitations as explained with respect writing data in recording medium as explained with respect to rejection of claim 3 above, Chiba

teaches erasing the information from recording medium (Chiba, col. 13, line 45 – col. 14, line 42) satisfying all the limitations of claim 9.

As per claim 12, Estakhri teaches recording a logical address in a logical address part (Estakhri, fig. 1).

Conclusion

13. The examiner also requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

14. When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAUSHIKKUMAR PATEL whose telephone number is (571)272-5536. The examiner can normally be reached on 7.30 am - 4.00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hyung S. Sough/
Supervisory Patent Examiner, Art Unit 2188
08/15/08

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